

## GASOLINE FUEL

## ABSTRACT OF THE DISCLOSURE

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Total combustion and evaporative emissions from gasoline pump fuels can be controlled with total emissions no higher than those currently allowed by the addition of an evaporative factor such as RVP to the model predicting 10 emissions, based on a number of considerations including the sensitivity of emission parameters (toxics, hydrocarbons, CO and NO<sub>x</sub>) as related to the variables in the predictive model (oxygenate content, sulfur, T<sub>90</sub>, T<sub>50</sub>, aromatics, olefins, benzene and RVP). The present pump gasolines will normally have compositions including T<sub>10</sub> no greater than 140°F, T<sub>90</sub> no greater than 330°F, 15 RVP no greater than 7 psi and usually lower and sulfur no greater than 50 ppmw. Oxygenates may be eliminated, permitting T<sub>50</sub> values to increase which is not unfavorable from the viewpoint of total emissions provided other parameters are held within specified limits. Aromatics, olefins and benzene are normally held to maximum of 35, 10 and 1 vol% respectively to achieve satisfactorily low total 20 emissions.